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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/635,070	08/09/2000	Steve G. Driediger	98006-4	5644

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EXAMINER

DUONG, FRANK

ART UNIT PAPER NUMBER

2666

DATE MAILED: 03/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/635,070

Applicant(s)

DRIEDIGER ET AL.

Examiner

Frank Duong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,9-11,21 and 22 is/are rejected.
- 7) ☒ Claim(s) 3-8 and 12-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This Office Action is a response to the communication dated 08/09/2000. Claims 1-22 are pending in the application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, 9-11 and 21-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Read et al (USP 6,236,623) (hereinafter "Read").

Regarding **claim 1**, in accordance with Read reference entirety, Read discloses a real time distribution system for a multi-element network (Fig. 1) comprising:

a master network element (*Fig. 1; element 12*) having timing means (*18, 22 and 84*) to derive a real time stamp (*col. 4, lines 42-51*);

distribution means (*Fig. 1; element 16*) to distribute the real time stamp to the remaining network elements (*Fig. 1; elements 14*) (*col. 4, lines 16-41*);

means in the network element (*Fig. 1; element 28*) to maintain a record of the most recently distributed real time stamp (*col. 4, lines 52-56*); and

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means in the network elements (Fig. 1; element 37) to derive a local time stamp from the recorded time stamp in the event of a failure of the distributed time stamp (*col. 4, lines 56-65*).

Regarding **claim 2**, in addition to features recited in base claim 1 (see rationales discussed above), Read further discloses wherein the local time stamp is disregarded upon receipt of a real time stamp distributed by the master network element (*col. 5, lines 33-67, Read discloses the communication processing delays are stored in the offset register 26 and forwarded to the associated slave control device 14 to compensate for the known time setting errors for each of the slave control devices 14. Thus, the local time stamp is disregarded upon receipt of the delays from the master network element 12*).

Regarding **claim 9**, in accordance with Read reference entirety, Read discloses a real time distribution system for a multi-element network (Fig. 1) comprising:

a master network element (*Fig. 1; element 12*) having timing means (*18, 22 and 84*) to derive a real time stamp (*col. 4, lines 42-51*);

distribution means (*Fig. 1; element 16*) to distribute the real time stamp to the remaining network elements (*Fig. 1; elements 14*) (*col. 4, lines 16-41*);

means in the network element (*Fig. 1; element 28*) to maintain a record of the most recently distributed real time stamp (*col. 4, lines 52-56*); and

synchronization means (*Fig. 1; element 32*) to indicate when the recorded real time stamp is synchronized with real time stamp distributed by the master network element (*col. 4, lines 42-44 and lines 53-55*).

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Regarding **claim 10**, in addition to features recited in base claim 9 (see rationales discussed above), Read further discloses wherein the timing means derives a real time stamp from an outside source (*Fig. 1; element 76 and col. 8, lines 41-67*).

Regarding **claim 11** in addition to features recited in base claim 9 (see rationales discussed above), Read further discloses wherein the synchronization means implements a synchronization feature in the network element upon a re-start operation (*col. 4, line 56 to col. 5, line 4*).

Regarding **claim 21**, in accordance with Read reference entirety, Read discloses a method of distributing a real time for a multi-element network (*Fig. 1*) comprising:

providing a master network element (*Fig. 1; element 12*) having timing means (*18, 22 and 84*) to derive a real time stamp (*col. 4, lines 42-51*);

providing distribution means (*Fig. 1; element 16*) to distribute the real time stamp to the remaining network elements (*Fig. 1; elements 14*) (*col. 4, lines 16-41*);

providing means in the network element (*Fig. 1; element 28*) to maintain a record of the most recently distributed real time stamp (*col. 4, lines 52-56*); and

providing means in the network elements (*Fig. 1; element 37*) to derive a local time stamp from the recorded time stamp in the event of a failure of the distributed time stamp (*col. 4, lines 56-65*).

Regarding **claim 22**, in accordance with Read reference entirety, Read discloses method of distributing a real time for a multi-element network (*Fig. 1*) comprising:

providing a master network element (*Fig. 1; element 12*) having timing means (*18, 22 and 84*) to derive a real time stamp (*col. 4, lines 42-51*);

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providing distribution means (*Fig. 1; element 16*) to distribute the real time stamp to the remaining network elements (*Fig. 1; elements 14*) (*col. 4, lines 16-41*);

providing means in the network element (*Fig. 1; element 28*) to maintain a record of the most recently distributed real time stamp (*col. 4, lines 52-56*); and

providing synchronization means (*Fig. 1; element 32*) to indicate when the recorded real time stamp is synchronized with real time stamp distributed by the master network element (*col. 4, lines 42-44 and lines 53-55*).

Allowable Subject Matter

3. Claims 3-8 and 12-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record, considered individually or in combination, fails to fairly show or suggest the claimed system of base claim 1 and further limit with the novel limitation of "*wherein the network elements derive an estimate of the next real time stamp to be delivered by the master network element*" in a manner as recited in the dependent claims 3-8; "*wherein at least one network element has a underrun error detector ... is correct*" as recited in the dependent claims 12 and 14; "*wherein at least one network element has a overrun error detector ... is correct*" as recited in the dependent claims 13 and 15; and "*wherein said real time stamp ... network elements*" as recited in claims 16-20.

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Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Eidson et al (USP 5,566,180).

Earnest (USP 5,896,388)

Hellum et al (USP 6,104,729).

Eidson (USP 6,278,710).

Gonzalez (USP 6,311,283).

Eidson (USP 6,370,159).

Mills, Network Time Protocol (NTP), RFC 1305, pages 1-120, March 1992.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Duong whose telephone number is (703) 308-5428. The examiner can normally be reached on 7:00AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (703) 308-5463. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Frank Duong
Examiner
Art Unit 2666

March 16, 2004